

EV Block On-Boarding Package



A note from the EV Blocks Team:

Welcome to the EV Blocks team! We are excited about this opportunity and look forward to getting you up and running with this new product line. This document is intended to serve as an overview and on-boarding guide for the EV Block product. Within this document you will find a variety of useful information as well as links to additional resources. Below is a table of contents for reference on the items that will be covered:

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Bill of Materials, Sourcing, and Materials Specification

Concrete

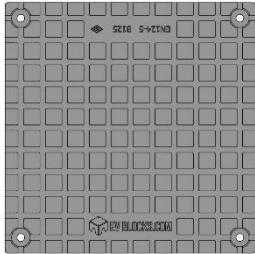
Quantity per EV Block:	0.17 cubic yards
Cost:	Per Producer
Specification:	4,000 psi – 5% to 7% air entrained
Sourcing:	Per Producer

Threaded Inserts



Quantity per EV Block:	4
Cost per Insert:	\$0.35
Specification:	1/2" x 2-1/2" Plastic Insert
Sourcing:	OnePlace or ALP Supply

Adaptor Plate & Hardware



Quantity per EV Block:	1 Plate, 4 bolts, 4 washers
Cost per Plate & Hardware:	\$105.00
Specification:	SMC composite plate, SS 1/2"-13 x 3" tamper-resistant bolt, SS 1/2" washer
Sourcing:	OnePlace



Lifting Pin Anchors (optional)



Quantity per EV Block:	2
Cost per Pin:	\$0.31
Specification:	1T x 2-3/8" Lifting Pin Anchor
Sourcing:	ALP Supply

Lifting Pin Recess Members (optional)



Quantity per EV Block: 2 (one-time purchase until replaced)
Cost per Recess Member: \$1.62
Specification: 1T Rubber Lifting Pin Recess Member
Sourcing: [ALP Supply](#)

Lifting Eyes (optional)



Quantity per EV Block: 2 (one-time purchase until replaced)
Cost per Lifting Eye: \$76.16
Specification: 1T Lifting Eye
Sourcing: [ALP Supply](#)

Production

In addition to product availability, one of the greatest benefits to the EV Block system for a producer is the consistency of the production process. The setup process for producing an EV Block is the same every time. To help guide you through the process, we have created a production video that outlines each step. Below is a link to the production video:

- [Production Video](#)

Although the video covers each step of the production process, we understand that some of the steps go by rather quickly. Below are some items that we would like to highlight as we feel these are critical to the production process. The times shown correspond to the video linked above.

1. (0:00) Prior to completing your first pour, it is recommended that you bolt the form down as this will aid in the performance of during the stripping process.
2. (0:28) You may choose to leave the blockout trees attached to the latch clamp doors to prevent them from inadvertently opening.
3. (1:45) The addition of a small amount of grease to the corners of the center core may aid in the stripping process.
4. (2:02) Remove any excess form oil from the insert plug holes.
5. (3:00) Inserts must be flush with the mat of slightly protruding. If the recesses into the hole, remove and replace the plug with a new one.
6. (4:21) The form is considered to be full when concrete reaches the top of the divider panels. You do not need to fill to the top of the doors.
7. (4:32) If using a lifting system other than what is shown, ensure that it sits below the finished concrete surface or is cut off after stripping. Any protruding anchor may impede the installation.
8. (5:42) The center core is spring loaded. Applying tension to the product should compress the springs. Tapping the center core pipe will force the center core back down.
9. (6:31) The final product is approximately 24" square. A 48" x 48" pallet is ideal but product may be allowed to overhang the pallet.
10. (Adaptor Plates) You may install adaptor plates as final step before yarding or simply send with each block purchase.

Sales and Promotion

Promotion of a new product line is essential for it to be successful. For the EV Block product, this step will be critical since you're introducing a brand-new product to your market. Potential customers should be made aware of the solution that EV Block provides. Below is a link to our sales and promotion resources that can be used to market to potential customers.

- [EV Blocks Product Flyer](#) – available for purchase in [OnePlace](#)
- [EV Blocks Leaflet \(Bi-Fold\)](#) - available for purchase in [OnePlace](#)
- [Explainer Video](#)

Primary Features:

- Universal adaptor plate can accommodate nearly all Level 2 chargers
- Great for residential or commercial installations
- Fast, easy and efficient installation compared to CIP alternatives
- Produced in a controlled environment ensuring quality and consistency
- Great option for future-proofing an installation site
- Uniform, clean finish everytime

Primary Customers:

- EV charger installers
- Site civil contractor
- Turn-key installers
- Distributors

Website Promotion and Lead Generation:

- The [EV Block website](#) features the product and each of our producers on a specific producer profile page. Form fill outs go directly to the producer. Any general inquiries will be passed along.
- It will be important that each producer create a product specific page on their website as well. The link between the two sites is great for SEO and allows your customers to learn more about your company.

Technical Information

The EV Block is a mass foundation system intended to support the vertical weight of a charger as well as resist any overturning that may result due to wind loading. Final testing is still to be completed, but hand-calculations have been prepared to verify EV Blocks suitability in a variety of wind conditions. According to our calculations, EV Blocks is capable of supporting nearly any charger in wind conditions up to 140 mph. Final testing will be completed to verify this position and our documentation will be updated accordingly.

As of today, we have a several technical documents to aid in the specification and explanation of the EV Blocks product:

- [Typical Product Drawing \(US units\)](#)
- [Typical Product Drawing \(Metric units\)](#)
- [Product Specification](#)
- [Installation Guide](#)

Installation

Proper installation is necessary to ensure long term performance of the EV Block. To help guide installers through the process, we have created a comprehensive installation guide. The streamlined 9-step installation process quickly delivers superior foundations for your electric car charging station. You can install EV Blocks in any weather, meaning you never have to worry about picking the right moment. Below are links to these two items.

- [Installation Guide](#)
- [Installation Testimonial Video](#)

Installation and Product FAQs:

- How do handle bury depth requirements in areas where the frost depth is beyond the height of the product (i.e. deeper than 24")?

In cases where regional frost depth requirements exceed 24", we recommend over-excavating to 6" beyond the frost depth requirement and backfilling with non-frost-susceptible (i.e. gravel) fill. This is a generally accepted industry practice for shallow foundation systems.

- How is the product lifted and handled in the field given there are no embedded anchors?

We recommend lifting using a double basket method with two nylon straps running in opposite directions and seated within the conduit pathways.

- Is this product UL listed? Or will it be UL listed?

We do not plan to seek UL listing at this time as we feel this is a non-electrical product similar to various other solutions currently being used (i.e. cast-in-place slab). If connections, within the cavity of the EV Block, are required, we recommend installing a UL listed junction box within the cavity and making the connections within that box.

- What is the adaptor plate made out of and is it hard to drill through?

The adaptor plate is an SMC composite material that consist of resin and fiberglass and is non-conductive. The material slightly harder to drill through than a typical hardwood and doesn't require any special drill bits.

- What size charger will fit onto the standard sized EV Block?

Nearly all Level 2 chargers will fit onto the standard EV Block provided that their required bolting fits within the 13" x 13" allowable bolting area of the adaptor plate.

- Do you have a similar type of foundation but larger for DC applications?

Not at this time but it is something that we are working on. DC chargers are much larger and there is far more variability in the overall size. As such, we are working to develop a product that will fit as many DC chargers as possible.

- What level of loading is the adaptor plate rated for?

The adaptor plate meets the loading and deflection requirements for ANSI Tier 15 loading which is 15,000 lbs design load and 22,500 lbs ultimate load. At this time that load rating is not required by and Code standard, but for passive installations, we wanted it to be able to resist incidental vehicular traffic. This load rating obviously allows us to support the self-weight of any charger that someone may want to use.

- Does this product meet the 'Made in America' standards?

The concrete portion of the product will always be able to meet this standard provided it is produced by a US based company. Our initial supply of adaptor plates are coming from overseas, so today, we do not meet this standard. We are working with a US based company to secure a supply chain of US made adaptor plates to ensure we can meet this standard moving forward. We anticipate having these available starting 2024.

- My project requires force protection, what are my options?

At this time, force protection will need to be installed independent from the foundation. We have an additional product that we will be rolling out soon that will allow for the installation of force protection directly onto the foundation.